



PTO/SB/08B (08-03)

Approved for use through 07/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	10/687,308
		Filing Date	10/16/2003
		First Named Inventor	James E. Millard
		Art Unit	2621
		Examiner Name	
Sheet 1	of 1	Attorney Docket Number	6162.004

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
mgd		L. G. Brown, "A Survey of Image Registration Techniques," Columbia University, Computer Science Department Publication, New York, NY, 1991	
		R. C. Gonzalez et al., Digital Image Processing, Addison-Wesley, Reading, MA, 1987 (book, copy not available)	
mgd		J. Schmit et al., "Extended averaging technique for derivation of error-compensating algorithms in phase-shifting interferometry," Applied Optics, Vol. 34, p. 3610, July 1995	
mgd		C. K. Hong et al., "Least-squares fitting of the phase map obtained in phase-shifting electronic speckle pattern interferometry," Optics Letters, Vol. 20, p.931, April 1995	
mgd		T. D. Upton et al., "Optical and electronic design of a calibrated multichannel electronic interferometer for quantitative flow visualization," Appl. Opt., V 34, No. 25, 1995	
		C. Koliopoulos et al., "Simultaneous phase shift interferometer," SPIE Vol. 1531, pp. 119-127, 1991	
mgd		Schwider et al., "Digital wave-front measuring interferometry: some systemic error sources," Applied Optics, Vol. 22, pp. 3421-3432, 1983	
mgd		Schwider et. al., "Phase shifting interferometry: reference phase error reduction," Applied Optics, Vol 28, No. 18, pp. 3889-3892, 1989	
mgd		Schwider et al., "Some considerations of reduction of reference phase error in phase-stepping interferometry," Applied Optics, Vol. 38, No. 4, pp. 655-659, 1999	
mgd		M. F. Kuchel, "Advanced Interferometry at Carl Zeiss," Proceedings of SPIE, Vol. 1720, p 452-456 (1992)	

Examiner Signature	<i>Maurice J. Detoch</i>	Date Considered	8/18/05
--------------------	--------------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Best Available Copy

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	
		Filing Date	
		First Named Inventor	James E. Millerd
		Art Unit	
		Examiner Name	
Sheet 1 of 2	Attorney Docket Number	6162.004	

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
mjd		US- 4,575,248	03/11/1986	Horwitz et al.	
mjd		US- 4,624,569	11/25/1986	Kwon	
mjd		US- 5,589,938	12/31/1996	Deck	
mjd		US- 5,663,793	09/02/1997	de Groot	
mjd		US- 5,777,741	07/07/1998	Deck	
mjd		US- 5,883,717	03/16/1999	DiMarzio et al.	
mjd		US- 5,926,283	07/20/1999	Hopkins	
mjd		US- 5,982,497	11/09/1999	Hopkins	
mjd		US- 6,304,330 B1	10/16/2001	Millerd et al.	
mjd		US- 6,249,289 B1	06/19/2001	Arnaud et al.	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁵
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature	<i>Maurice J. Detsch</i>	Date Considered	8/18/05
-----------------------	--------------------------	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Best Available Copy

Substitute for form 1449PTO		Comp to If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	
		Filing Date	
		First Named Inventor	James E. Millerd
		Art Unit	
		Examiner Name	
Sheet 2 of 2	Attorney Docket Number	6162.004	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
mgd		L. G. Brown, "A Survey of Image Registration Techniques," Columbia University, Computer Science Department Publication, New York, NY, 1991	
mgd		R. C. Gonzalez et al., Digital Image Processing, Addison-Wesley, Reading, MA, 1987	
mgd		J. Schmit et al., "Extended averaging technique for derivation of error-compensating algorithms in phase-shifting interferometry," Applied Optics, Vol. 34, p. 3610, July 1995	
mgd		C. K. Hong et al., "Least-squares fitting of the phase map obtained in phase-shifting electronic speckle pattern interferometry," Optics Letters, Vol. 20, p.931, April 1995	
mgd		T. D. Upton et al., "Optical and electronic design of a calibrated multichannel electronic interferometer for quantitative flow visualization," Appl. Opt., Vol. 34, No. 25, 19	
mgd		C. Koliopoulos et al., "Simultaneous phase shift interferometer," SPIE Vol. 1531, pp. 119-127, 1991	
mgd		Schwider et al., Applied Optics, Vol. 22, pp. 3421-3432, 1983)	
mgd		Schmit et. al., Applied Optics Vol. 34, pp. 3610-3619, 1995	
mgd		M. F. Kuchel, "Advanced Interferometry at Carl Zeiss," Proceedings of SPIE, Vol. 1720, p.452-456 (1992)	

Examiner Signature	Marissa J. Delsch	Date Considered	8-28-05
--------------------	-------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-788-9199) and select option 2.